

Access DB# 125081

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: DAWN GARRETT Examiner #: 76107 Date: 6/18/2004
Art Unit: 1774 Phone Number ~~272~~ 272-1523 Serial Number: 10/749,390
Mail Box and Bldg/Room Location: Remsen 5C75 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Diphenylanthracene Derivatives and Organic
Electroluminescent Device Employing Same
Inventors (please provide full names):

JI-HOON LEE, SOO-HYOUNG LEE, THUN-MO SONEarliest Priority Filing Date: (2003-49 Korea) 1/02/2003

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search attached formula 1

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>ED</u>	NA Sequence (#) _____	STN <u>\$ 219.20</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>✓ (2)</u> <u>(subsets)</u>	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____
Date Completed: <u>6-24-04</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>5</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>65</u>	Other _____	Other (specify) _____

=> file reg

FILE 'REGISTRY' ENTERED AT 11:56:45 ON 24 JUN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

=> d his

L1 FILE 'LREGISTRY' ENTERED AT 11:37:26 ON 24 JUN 2004
STR

L2 FILE 'REGISTRY' ENTERED AT 11:48:25 ON 24 JUN 2004
0 S L1
L3 STR L1
L4 50 S L3
L5 STR L1

L6 FILE 'REGISTRY' ENTERED AT 11:51:53 ON 24 JUN 2004
50 S L5
L7 2529 S L5 FUL
SAV L7 GAR390/A
L8 0 S L1 SSS SAM SUB=L7
L9 6 S L1 SSS FUL SUB=L7
SAV L9 GAR390A/A

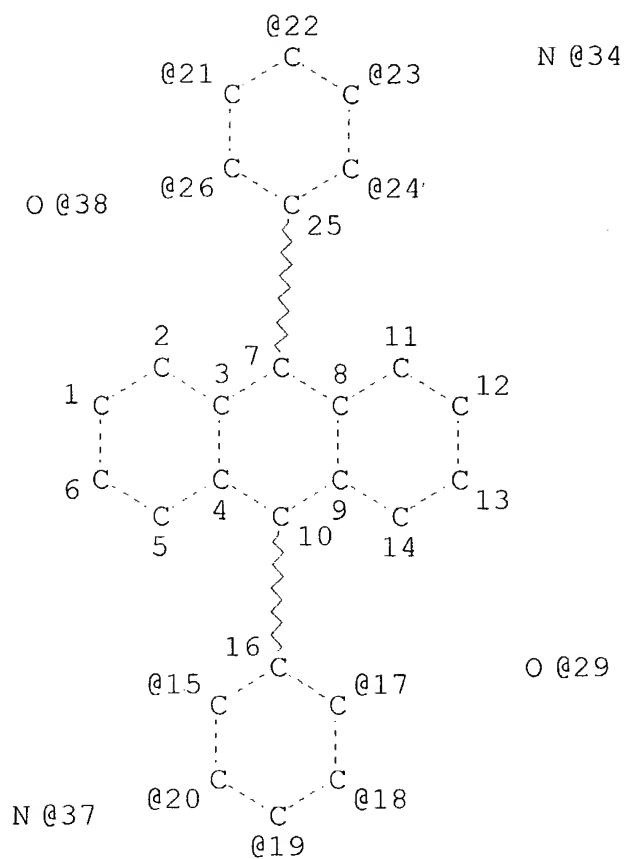
L10 FILE 'CAOLD' ENTERED AT 11:56:03 ON 24 JUN 2004
0 S L9

L11 FILE 'ZCAPLUS' ENTERED AT 11:56:08 ON 24 JUN 2004
2 S L9

FILE 'REGISTRY' ENTERED AT 11:56:45 ON 24 JUN 2004

=> d l9 que stat

L1 STR



VPA 34-26/21/22/23/24 U

VPA 38-26/21/22/23/24 U

VPA 29-17/18/19/20/15 U

VPA 37-17/18/19/20/15 U

NODE ATTRIBUTES:

NSPEC IS RC AT 34

NSPEC IS RC AT 37

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

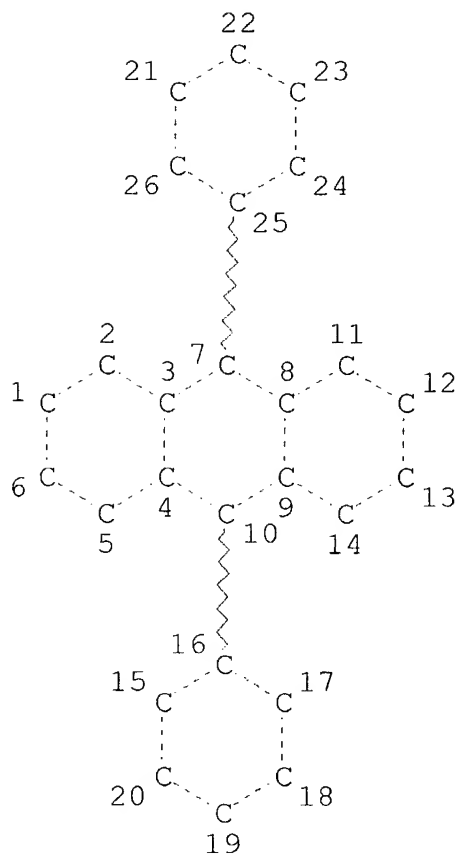
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 30

STEREO ATTRIBUTES: NONE

L5 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

L7 2529 SEA FILE=REGISTRY SSS FUL L5

L9 6 SEA FILE=REGISTRY SUB=L7 SSS FUL L1

100.0% PROCESSED 2529 ITERATIONS

6 ANSWERS

SEARCH TIME: 00.00.02

=> file zcaplus

FILE 'ZCAPLUS' ENTERED AT 11:56:55 ON 24 JUN 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l11 1-2 ibib abs hitstr hitrn

L11 ANSWER 1 OF 2 ZCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:5185 ZCAPLUS
 DOCUMENT NUMBER: 140:78187
 TITLE: Polymeric insulation for metalization with
 aluminum and copper
 INVENTOR(S): Sezi, Recai; Walter, Andreas; Maltenberger,
 Anna; Lowack, Klaus; Halik, Marcus
 PATENT ASSIGNEE(S): Infineon Technologies Ag, Germany
 SOURCE: Eur. Pat. Appl., 41 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1375563	A1	20040102	EP 2003-14160	20030624
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
DE 10228769	A1	20040205	DE 2002-10228769	20020627
CN 1472195	A	20040204	CN 2003-145750	20030627
JP 2004099873	A2	20040402	JP 2003-184081	20030627
US 2004082756	A1	20040429	US 2003-609453	20030627

PRIORITY APPLN. INFO.: DE 2002-10228769 A 20020627

AB The title materials, which can be easily applied to electronic components and, after cyclization, have good insulating properties and resistance to chems. and heat, are poly(2-hydroxyamides) of specified structure. Adding 95 mmol 2,6-naphthalenedicarbonyl chloride to 100 mmol 4,4'-(diphenylmethylene)bis(2-aminophenol) in N-methylpyrrolidone stirred at 10°, stirring for 1 h at 10° and 1 h at 20°, adding 10 mmol 5-norbornene-2,3-dicboxylic anhydride in 50 mL γ -butyrolactone dropwise at 10°, and stirring at 10° for 1 h and 20° for 1 h gave a polymer (I). Spin-coating of a soln. of I on a wafer, heating at 120, 200, and 425° for 1, 2, and 60 min, resp., and detn. of dielec const. and chem. stability are exemplified.

IT 640298-42-6D, cyclized 640298-43-7D, end-capped with methacrylic acid, cyclized

(polymeric insulation for metalization with aluminum and copper)

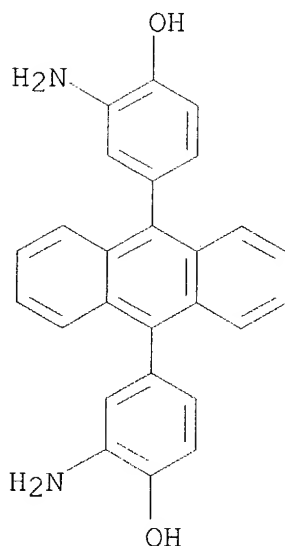
RN 640298-42-6 ZCAPLUS

CN 2,6-Naphthalenedicarbonyl dichloride, polymer with
4,4'-(9,10-anthracenediyl)bis[2-aminophenol], [1,1'-biphenyl]-4,4'-
dicarbonyl dichloride and 4,4'-(diphenylmethylene)bis[2-aminophenol]
(9CI) (CA INDEX NAME)

CM 1

CRN 640298-41-5

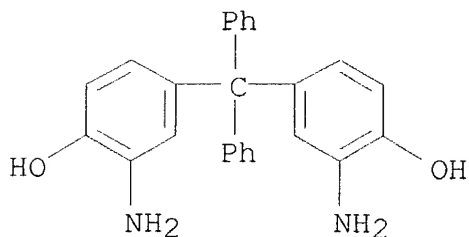
CMF C26 H20 N2 O2



CM 2

CRN 20638-06-6

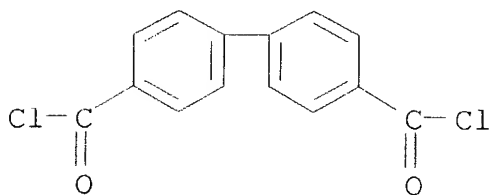
CMF C25 H22 N2 O2



CM 3

CRN 2351-37-3

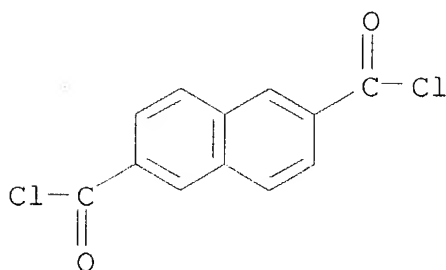
CMF C14 H8 Cl2 O2



CM 4

CRN 2351-36-2

CMF C12 H6 Cl2 O2



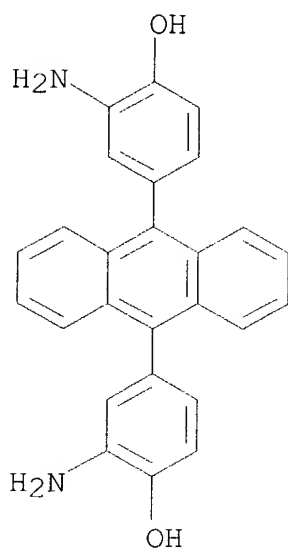
RN 640298-43-7 ZCAPLUS

CN 2,6-Naphthalenedicarbonyl dichloride, polymer with
4,4'-(9,10-anthracenediyl)bis[2-aminophenol], 4,4'-diamino[1,1'-
biphenyl]-3,3'-diol and 5-(phenylethynyl)-1,3-benzenedicarbonyl
dichloride (9CI) (CA INDEX NAME)

CM 1

CRN 640298-41-5

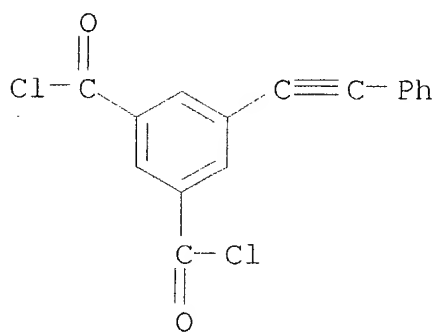
CMF C26 H20 N2 O2



CM 2

CRN 393543-14-1

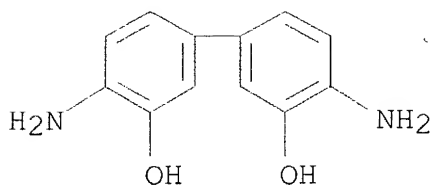
CMF C16 H8 C12 O2



CM 3

CRN 2373-98-0

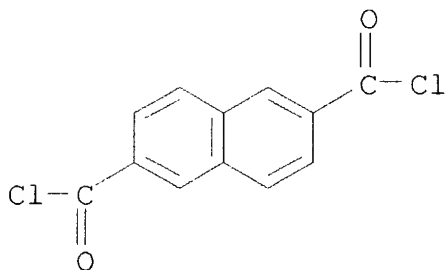
CMF C12 H12 N2 O2



CM 4

CRN 2351-36-2

CMF C12 H6 C12 O2



IT 640298-42-6D, cyclized 640298-43-7D, end-capped
with methacrylic acid, cyclized

(polymeric insulation for metalization with aluminum and copper)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L11 ANSWER 2 OF 2 ZCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:5168 ZCAPLUS

DOCUMENT NUMBER: 140:77566

TITLE: Preparation of bis-2-amino(thio)phenols for use
in heterocyclic polymers

INVENTOR(S): Walter, Andreas; Gnuechtel, Ingo; Maltenberger,
Anna; Sezi, Recai; Hartmann, Horst

PATENT ASSIGNEE(S): Infineon Technologies Ag, Germany

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

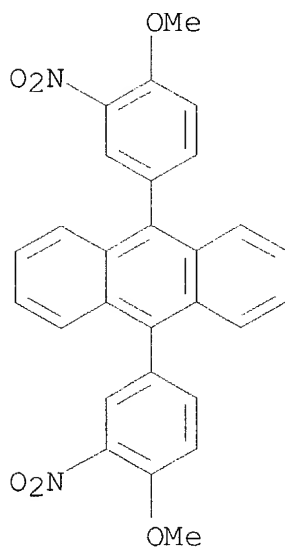
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1375471	A1	20040102	EP 2003-12042	20030528
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
DE 10228763	A1	20040129	DE 2002-10228763	20020627
JP 2004026831	A2	20040129	JP 2003-180250	20030624
CN 1470501	A	20040128	CN 2003-145282	20030627
US 2004049081	A1	20040311	US 2003-609456	20030627
PRIORITY APPLN. INFO.:			DE 2002-10228763 A	20020627
OTHER SOURCE(S):			MARPAT 140:77566	
AB The title compds., useful in prodn. of insulating polymers (e.g., polybenzoxazoles, polybenzothiazoles), are prepd. by nitr(os)ation of the corresponding phenols and catalytic hydrogenation of the nitro(so) compds. Adding 20 mL isoamyl nitrite dropwise to 57 mmol 4,4'-(diphenylmethylen)bisphenol in 100 mL AcOH at room temp. gave 91% 4,4'-(diphenylmethylen)bis(2-nitrosophenol) (I). Hydrogenation of 50 mmol I in 250 mL THF over 2.00 g 5% Pd/C catalyst at room temp./2 bar for 24 h gave 94% 4,4'-(diphenylmethylen)bis(2-aminophenol), isolated as the hydrochloride.				
IT	640289-13-0P (prepn. and demethylation)			
RN	640289-13-0 ZCAPLUS			
CN	Anthracene, 9,10-bis(4-methoxy-3-nitrophenyl)- (9CI) (CA INDEX NAME)			

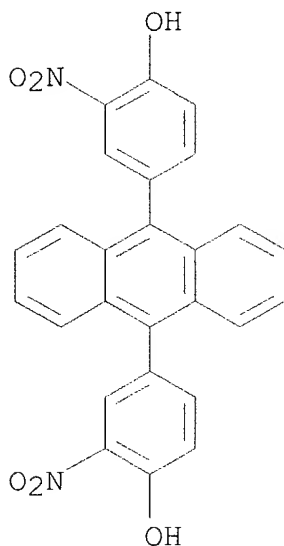


IT 640289-14-1P

(prepn. and hydrogenation)

RN 640289-14-1 ZCAPLUS

CN Phenol, 4,4'-(9,10-anthracenediyl)bis[2-nitro- (9CI) (CA INDEX NAME)

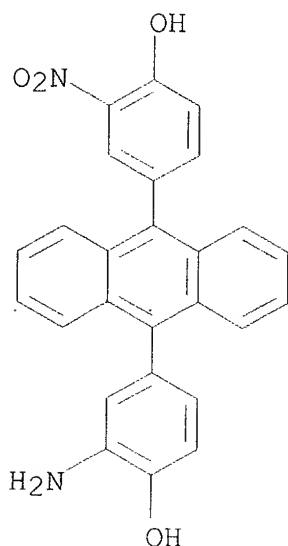


IT 640289-15-2P

(prepn. of diaminobisphenols)

RN 640289-15-2 ZCAPLUS

CN Phenol, 2-amino-4-[10-(4-hydroxy-3-nitrophenyl)-9-anthracenyl]- (9CI) (CA INDEX NAME)



IT 640289-13-0P
(prepn. and demethylation)
IT 640289-14-1P
(prepn. and hydrogenation)
IT 640289-15-2P
(prepn. of diaminobisphenols)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT